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# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/010,490	01/21/1998	KANJI HATA	177/527415	8750

7590

08/21/2003

WENDEROTH LIND AND PONACK  
2033 K STREET N W  
SUITE 800  
WASHINGTON, DC 20006

EXAMINER

KIM, PAUL D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 08/21/2003

39

Please find below and/or attached an Office communication concerning this application or proceeding.

EC

**Office Action Summary**

Application No.

09/010,490

Applicant(s)

HATA ET AL.

Examiner

Paul D Kim

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-11, 13-15, 18-28, 30, 32 and 34 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 8-11, 13-15, 18-28, 30, 32 and 34 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 37.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This office action is a response to the amendment filed on 7/16/2003.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 8-11, 13-15, 18-19, 22-26, 28, 30, 32 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamijima (US PAT. 5,002,448).

Fig. 1 of Kamijima teaches an apparatus for mounting electrical components comprising: a pair of component supply tables (15) arranged on opposite sides of a board mounting position (14); a first mounting head section (31) having a plurality of suction nozzles (18), which are pivotally attached to a vacuum source (19), wherein the first mounting head section moves a first (X) and second (Y) direction to mount the components on a printed circuit board (16), which is not moved; and a second mounting head section (31) having a plurality of suction nozzles (18), which are pivotally attached to a vacuum source (19), wherein the second mounting head section moves a third (X) and fourth (Y) direction to mount the components on a board (16), wherein the first and second mounting head are independently movable between one of the component supply tables and the board.

The transferred direction (X) of the printed circuit board is parallel with the first and third directions and is perpendicular with the second and forth directions of the first and second mounting heads.

Kamijima also teaches that the suction nozzles are pivotally attached to the vacuum source described in col. 3, lines 26-44, so that the suction nozzles are rotated for sucking the components prior to mount the components to the board.

**NOTE:** Webster's Dictionary 10th Edition:

**piv·ot** (piv'et) *noun*

1. A short rod or shaft on which a related part rotates or swings.
2. A person or thing on which something depends or turns; the central or crucial factor.
3. The act of turning on or as if on a pivot.

Re. Claims 10 and 11: Kamijima teaches that the apparatus is fully operated automatically and control logic for operation is any known type in the art (col. 5, lines 6-13).

Re. Claims 13-15: Kamijima teaches that one of the first and second mounting heads has a plurality of component suction nozzles as shown in Fig. 2.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20, 21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamijima.

Kamijima teaches all the claimed invention as set forth above except the component supply tables accommodated different kinds of components. It would have been deemed a matter of designer's choice as to the components being mounted. Since the components solve no state patentable feature as to the claimed apparatus, it would be obvious to select components having different configuration on the supply tables based on the operation.

### ***Response to Arguments***

6. Applicant's arguments filed 7/16/2003 have been fully considered but they are not persuasive. Applicant argues that the prior art of record fails to disclose the claimed invention such as the gripping devices of Kamijima cannot be rotated as required in the claimed invention. Examiner traverses the argument that Kamijima teaches the suction nozzles, which are pivotally attached to the vacuum source, so that the suction nozzles are rotated for sucking the components prior to mount the components to the board. Even though there is no attachment figure indicated by applicant, the apparatus of Kamijima meets all of the limitation as described set forth above including the rotatable gripping devices.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

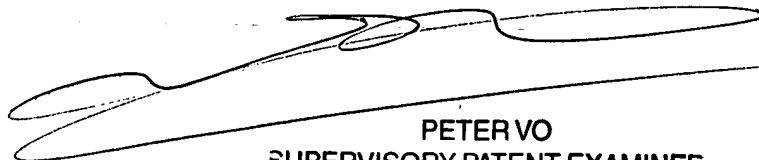
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356. The examiner can normally be reached on Tuesday-Friday between 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5648.

pdk

A handwritten signature in black ink, appearing to read 'PETER VO', is written over a horizontal line.

PETER VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700